

CLAIMS

What is claimed is:

- 5 1. A method of screening defects comprising steps of:
- (a) measuring a quiescent current at a first supply voltage for each of a plurality of devices;
- (b) measuring a quiescent current at a second supply
10 voltage for each of the plurality of devices;
- (c) generating a plot of the quiescent current measured at the first supply voltage vs. the quiescent current measured at the second supply voltage for each of the plurality of devices;
- 15 (d) determining a range of intrinsic variation of quiescent current in the plot; and
- (e) identifying any of the plurality of devices corresponding to a measurement plotted outside the range of intrinsic variation as defective.
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2. The method of Claim 1 wherein the second supply voltage has a value selected so that quiescent current of substantially all of the plurality of devices is within the range of intrinsic variation.
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3. The method of Claim 1 wherein the first supply voltage is a nominal supply voltage of the plurality of devices.

4. The method of Claim 1 wherein the second supply voltage has a value selected in a sub-threshold voltage region of the plurality of devices.

5 5. The method of Claim 1 wherein the quiescent current is measured at the first supply voltage or the second supply voltage for multiple stop points in a test pattern.

10 6. The method of Claim 1 wherein the quiescent current is measured at the second supply voltage for only one stop point in a test pattern.

15 7. A computer program product for screening defects comprising:

a medium for embodying a computer program for input to a computer; and

a computer program embodied in the medium for causing the computer to perform steps of:

20 (a) measuring a quiescent current at a first supply voltage for each of a plurality of devices;

(b) measuring a quiescent current at a second supply voltage for each of the plurality of devices;

25 (c) generating a plot of the quiescent current measured at the first supply voltage vs. the quiescent current measured at the second supply voltage for each of the plurality of devices;

(d) determining a range of intrinsic variation of quiescent current in the plot; and

(e) identifying any of the plurality of devices corresponding to a measurement plotted outside the range of intrinsic variation as defective.

5 8. The computer program product of Claim 7 wherein the second supply voltage has a value selected so that quiescent current of substantially all of the plurality of devices is within the range of intrinsic variation.

10 9. The computer program product of Claim 7 wherein the first supply voltage is a nominal supply voltage of the plurality of devices.

15 10. The computer program product of Claim 7 wherein the second supply voltage has a value selected in a sub-threshold voltage region of the plurality of devices.

20 11. The computer program product of Claim 7 wherein the quiescent current is measured at the first supply voltage or the second supply voltage for multiple stop points in a test pattern.

25 12. The method of Claim 1 wherein the quiescent current is measured at the second supply voltage for only one stop point in a test pattern.